

FIG. 1

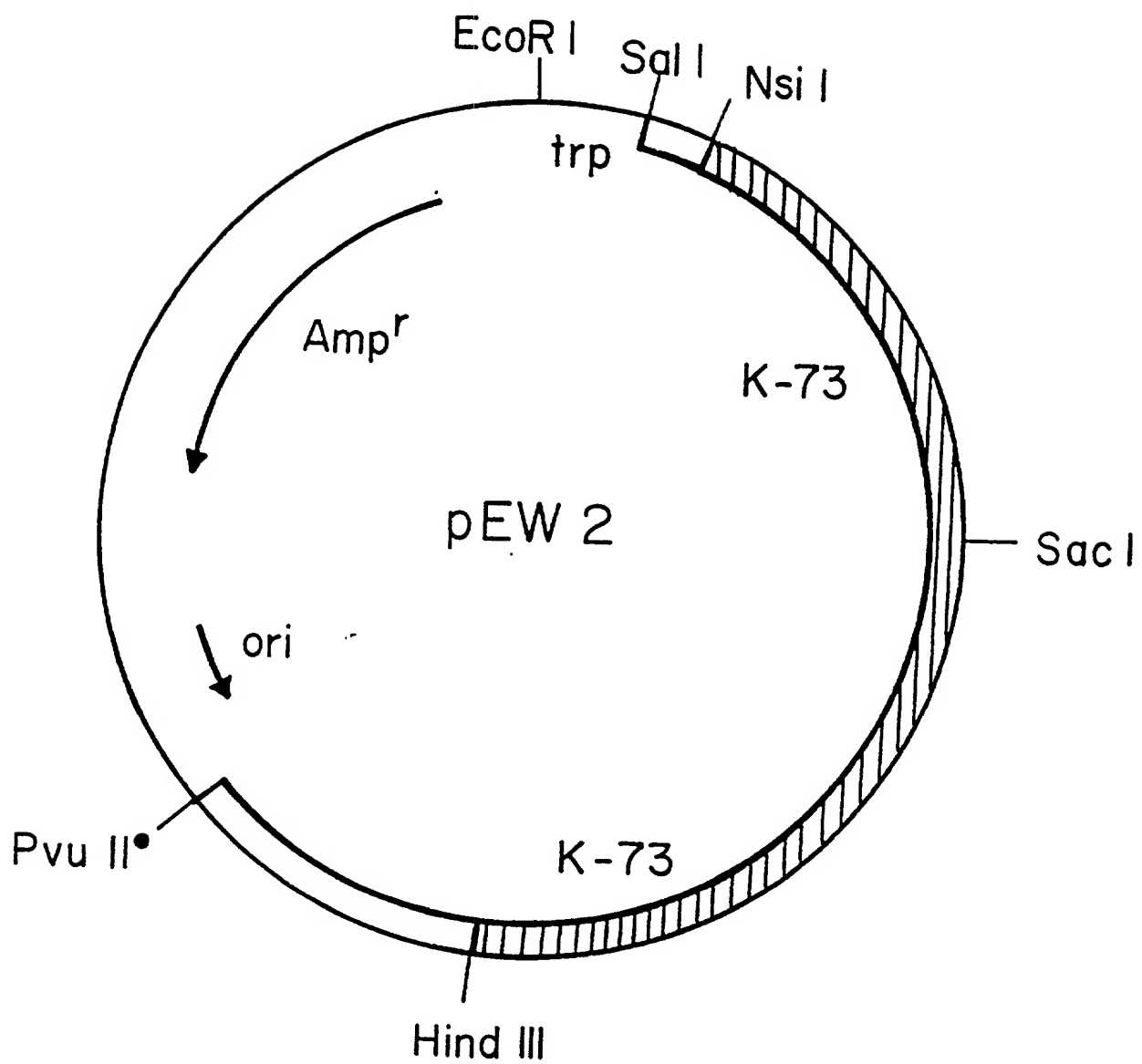


FIG. 2

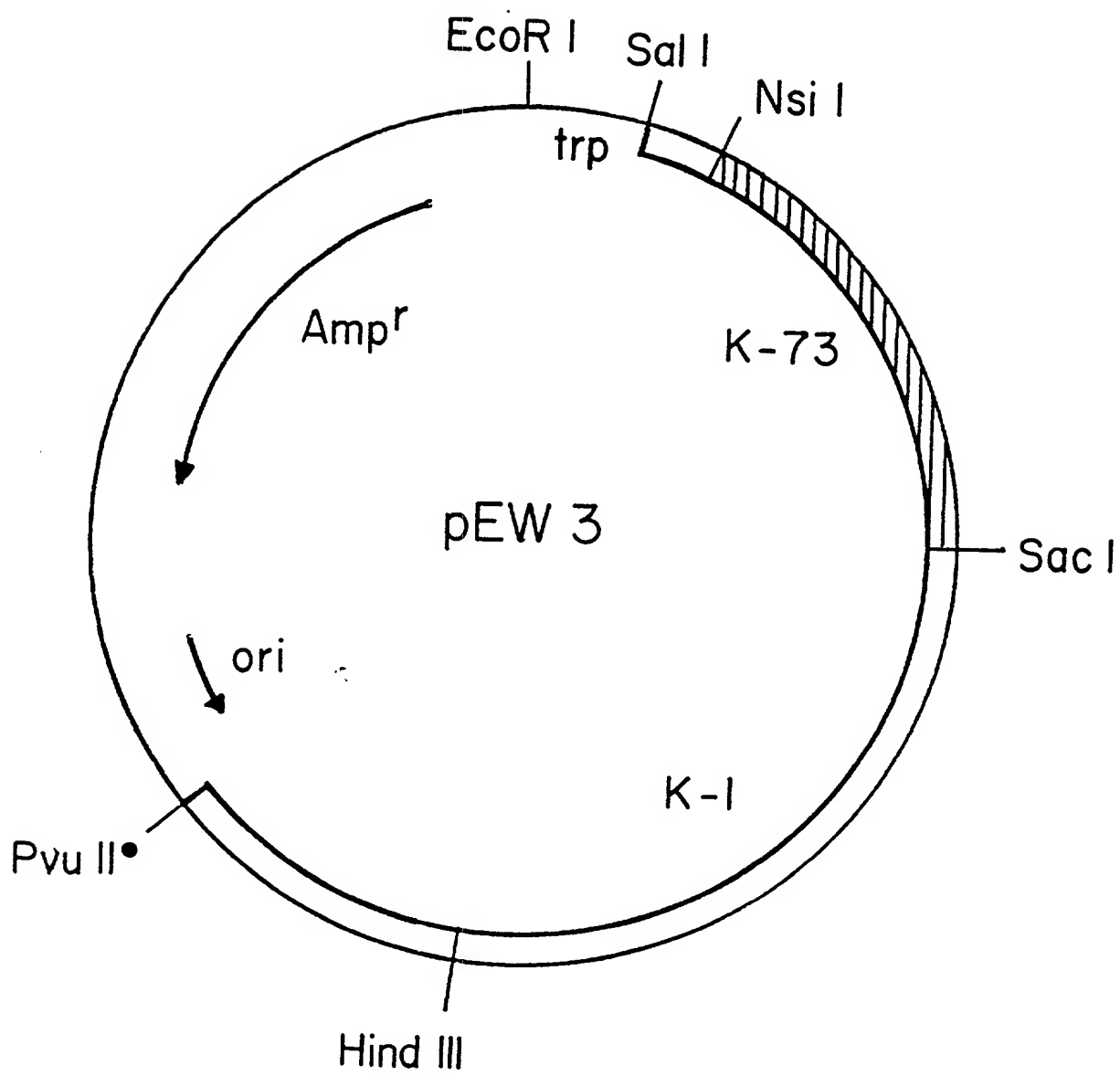


FIG. 3

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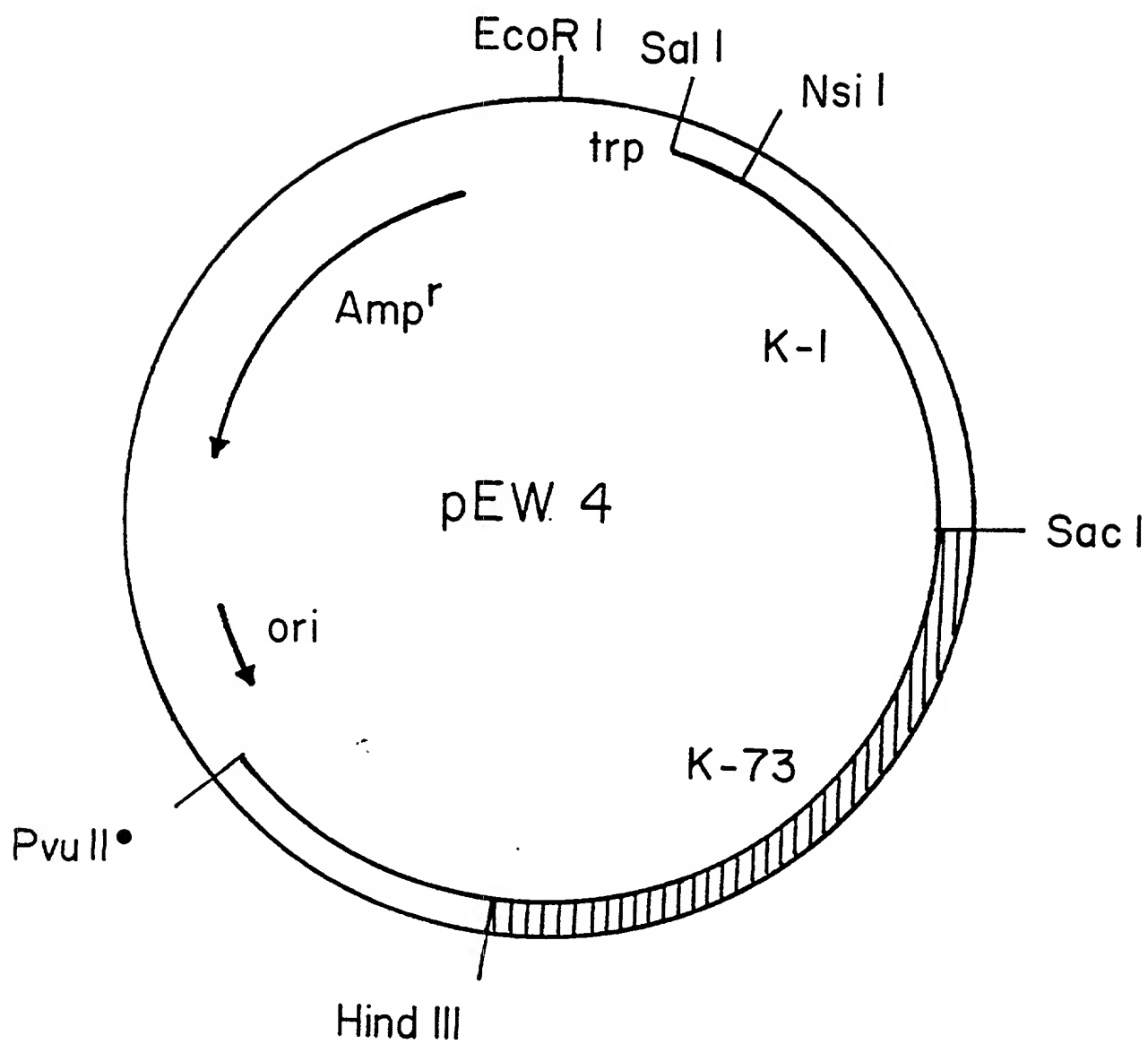


FIG. 4

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                (start HD-73)                ATG GATAACAATC 400
CGAACATCAA TGAATGCATT CCTTATAATT GTTTAAGTAA CCCTGAAGTA
GAAGTATTAG GTGGAGAAAG AATAGAAACT GGTACACCC CAATCGATAT 500
TTCCTTGCTG CTAACGCAAT TTCTTTTGAG TGAATTTGTT CCCGGTGCTG
GATTTGTGTT AGGACTAGTT GATATAATAT GGGGAATTTT TGGTCCCTCT 600
CAATGGGACG CATTCTTGTT ACAAATTGAA CAGTTAATTA ACCAAAGAAT
AGAAGAATTC GCTAGGAACC AAGCCATTTT TAGATTAGAA GGACTAAGCA 700
ATCTTTATCA AATTTACGCA GAATCTTTTA GAGAGTGGGA AGCAGATCCT
ACTAATCCAG CATTAGAGA AGAGATGCGT ATTCAATTCA ATGACATGAA 800
CAGTGCCCTT ACAACCGCTA TTCCTCTTTT TGCAGTTCAA AATTATCAAG
TTCCTCTTTT ATCAGTATAT GTTCAAGCTG CAAATTTACA TTTATCAGTT 900
TTGAGAGATG TTTCAGTGTT TGGACAAAGG TGGGGATTTG ATGCCGCGAC
TATCAATAGT CGTTATAATG ATTTAACTAG GCTTATTGGC AACTATACAG 1000
ATTATGCTGT ACGCTGGTAC AATACGGGAT TAGAACGTGT ATGGGGACCG
GATTCTAGAG ATTGGGTAAG GTATAATCAA TTTAGAAGAG AATTAACACT 1100
AACTGTATTA GATATCGTTG CTCTGTTCCC GAATTATGAT AGTAGAAGAT
ATCCAATTCG AACAGTTTCC CAATTAACAA GAGAAATTTA TACAAACCCA 1200
GTATTAGAAA ATTTTGATGG TAGTTTTCSA GGCTCGGCTC AGGGCATAGA
AAGAAGTATT AGGAGTCCAC ATTTGATGSA TATACTTAAC AGTATAACCA 1300
TCTATACGGA TGCTCATAGG GGTATTATT ATTGGTCAGG GCATCAAATA
ATGGCTTCTC CTGTAGGGTT TTCGGGGCCA GAATTCACCT TTCCGCTATA 1400
TGGAACTATG GGAAATGCAG CTCCACAACA ACGTATTGTT GCTCAACTAG
GTCAGGGCGT GATAGAACAA TTATCGTCCA CTTTATATAG AAGACCTTTT 1500
AATATAGGGA TAAATAATCA ACAACTATCT GTTCTTGACG GGACAGAATT
TGCTTATGGA ACCTCCTCAA ATTTGCCATC CGCTGTATAC AGAAAAAGCG 1600
GAACGGTAGA TTCGCTGGAT GAAATACCGC CACAGAATAA CAACGTGCCA
CCTAGGCAAG GATTTAGTCA TCGATTAAGC CATGTTTCAA TGTTTCBTTC 1700
AGGCTTTAGT AATAGTAGTG TAAGTATAAT AAGAGCT (end hd-73)
                (start HD-1)                CCAACGT TTTCTTGGCA GCATCGCAGT 1900
GCTGAATTTA ATAATATAAT TCCTTCATCA CAAATTACAC AAATACCTTT
AACAAAATCT ACTAATCTTG GCTCTGGAAC TTCTGTCGTT AAAGGACCAG 2000
GATTTACAGG AGGAGATATT CTTGGAAGAA CTTACCTGG CCAGATTTCA
ACCTTAAGAG TAAATATTAC TGCACCATTA TCACAAAGAT ATCGGGTAAG 2100
AATTCGCTAC GCTTCTACTA CAAATTTACA ATTCCATACA TCAATTGACG
GAAGACCTAT TAATCAGGGT AATTTTTTCA CAACTATGAG TAGTGGGAGT 2200
AATTTACAGT CCGGAAGCTT TAGGACTGTA GGTTTTACTA CTCCGTTTAA
CTTTTCAAT GGATCAAGTG TATTTACGTT AAGTGCTCAT GTCTTCAATT 2300
CAGGCAATGA AGTTTATATA GATCGAATTG AATTTGTTCC GGCAGAAGTA
ACCTTTGAGG CAGAATATGA TTTAGAAAGA GCACAAAAGG CGGTGAATGA 2400
GCTGTTTACT TCTTCCAATC AAATCGGGTT AAAACAGAT GTGACGGATT
ATCATATTGA TCAAGTATCC AATTTAGTTG AGTGTTTATC AGATGAATTT 2500
TGTCTGGATG AAAACAAGA ATTGTCCGAG AAAGTCAAAC ATGCGAAGCG
ACTTAGTGAT GAGCGGAATT TACTTCAAGA TCCAACTTC AGAGGGATCA 2600
ATAGACAACT AGACCGTGGC TGGAGAGGAA GTACGGATAT TACCATCCAA
GGAGGCGATG ACGTATTCAA AGAGAATTAC GTTACGCTAT TGGGTACCTT 2700
TGATGAGTGC TATCCAACGT ATTTATATCA AAAAATAGAT GAGTCGAAAT

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FIG. 5A

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TAAAAGCCTA TACCCGTTAT CAATTAAGAG GGTATATCGA AGATAGTCAA 2800
GACTTAGAAA TCTATTTAAT TCGCTACAAT GCAAAACATG AAACAGTAAA
TGTGCCAGGT ACGGGTTCCT TATGGCCGCT TTCAGCCCAA AGTCCAATCG 2900
GAAAGTGTGG AGAGCCGAAT CGATGCGCGC CACACCTTGA ATGGAATCCT
GACTTAGATT GTTCGTGTAG GGATGGAGAA AAGTGTGCCC ATCATTGCGA 3000
TCATTTCTCC TTAGACATTG ATGTAGGATG TACAGACTTA AATGAGGACC
TAGGTGTATG GGTGATCTTT AAGATTAAGA CGCAAGATGG GCACGCAAGA 3100
CTAGGGAATC TAGAGTTTCT CGAAGAGAAA CCATTAGTAG GAGAAGCGCT
AGCTCGTGTG AAAAGAGCGG AGAAAAAATG GAGAGACAAA CGTGAAAAAT 3200
TGGAAATGGG AACAATATC GTTTATAAAG AGGCAAAAGA ATCTGTAGAT
GCTTTATTTG TAAACTCTCA ATATGATCAA TTACAAGCGG ATACGAATAT 3300
TGCCATGATT CATGCGGCGA ATAAACGTGT TCATAGCATT CGAGAAGCTT
ATCTGCCTGA GCTGTCTGTG ATTCCGGGTG TCAATGCGGC TATTTTGTAA 3400
GAATTAGAAG GGCATTTTT CACTGCATTC TCCCTATATG ATGCGAGAAA
TGTCATTAAG AATGGTGATT TTAATAATGG CTTATCCTGC TGGAACGTGA 3500
AAGGGCATGT AGATGTAGAA GAACAAAACA ACCAACGTTT GGTCTTGTG
CTTCCGGAAT GGGAGGAGAG AGTGTACAAA GAAGTTCGTG TCTGTCCGGG 3600
TCGTGGCTAT ATCCTTCGTG TCACAGCGTA CAAGGAGGGA TATGGAGAAG
GTTGCGTAAC CATTGATGAG ATCGAGAACA ATACAGACGA ACTGAAGTTT 3700
AGCAACTGCG TAGAAGAGGA AATCTATCCA AATAACACGG TAACGTGTAA
TGATTATACT GTAAATCAAG AAGAATACGG AGGTGCGTAC ACTTCTCGTA 3800
ATCGAGGATA TAACGAAGCT CCTTCCGTAC CAGCTGATTA TGCCTCAGTC
TATGAAGAAA AATCGTATAC AGATGGACGA AGAGAGAATC CTTGTGAATT 3900
TAACAGAGGG TATAGGGATT ACACGCCACT ACCAGTTGGT TATGTGACAA
AAGAATTAGA ATACTTCCCA GAAACCGATA AGGTATGGAT TGAGATTGGA 4000
GAAACGGAAG GAACATTTAT CGTGGACAGC GTGGAATTAC TCCTTATGGA
GGAA (end HD-1)

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FIG. 5B

MDNNPNINECIPYNCLSNP E V E V L G G E R I E  
 TGYTPIDISLSLTQFL LSEFVP GAGFV LGL  
 VDI IWGIFGPSQWDAFLVQIEQLINQRIEE  
 FARNQAISRLEGLSNLYQIYAESFREWEAD  
 PTNPALREEMRIQFNDMNSALTTAIP LFAV  
 QNYQVPLLSVYVQAANLHLSVLRDVS VFGQ  
 RWGFDAATINSRYNDLTRLIGNYTDYAVRW  
 YNTGLERVWGPDSRDWVRYNQFRRELT LTV  
 LDIVALFPNYDSRRYP IRTVSQ LTR E I YTN  
 PVLENFDGSGFRGSAQGIERSIRSPHLM DIL  
 NSIT IYTDAH RGY YWSGHQIMASPVGFSG  
 PEFTFPLYGTMGNAAPQQRIVAQLGQG VYR  
 T LSSSTLYRRPFNIGINNQQLSVLDGTEFAY  
 GTSSSNLPSAVYRKSGTVDSLDEIPPQNNNV  
 PPRQGFSHRLSHVSMFRSGFSNSSSVSIRA  
 PTF SWQHRSAEFNNIIPSSQITQIPLTKST  
 NLGSGT SVVKGP GFTGGDILRRTSPGQIST  
 LRVNITAPLSQR YRVRI RYASTTNLQFHTS  
 IDGRP INQGNFSATMSSGSNLQSGSFRTVG  
 FTT P FNFSNGSSVFTLSAHVFNSGNEVYID  
 RIEFVPAEVTFEAEYDLERAQKAVNELFTS  
 SNQIGLKTDVTDYHIDQVSNLVECLSDEF C  
 LDEKQELSEKVKHAKRLSDERNLLQDPNFR  
 GINRQLDRGW RGST DITIQQGGDDVFKENYV  
 TLLGT FDECYPTYLYQKIDESK LKAYTRYQ  
 LRGYIEDSQDLEIYLIRYN AKHETVNVPGT  
 GSLWPLSAQSPIGKCGEPNRCAPHLEWNP D  
 LDCSCRDGEKCAHHSHHFSLDIDVGCTDLN  
 EDLG VWVIFKIKTQDGHARLG NLEFLEEK P  
 LVGEALARVKRAEKKWRD KREKLEWETNI V  
 YKEAKESVDALFVNSQYDQLQADTNIA MIH  
 AADKRVHSIREAYLP ELSVIPGVNA AIFEE  
 LEGRIFTA FSLYDARNVIKNGDFNNGLS CW  
 NVKGHV DVEEQNNQRSVLVLPEWEAEVSQE  
 VRVCPGRGYILRV TAYKEGYGEGCVTIHEI  
 ENNTDELKFSNCVEEEIYPNNTVTCNDYTV  
 NQEEYGGAYTSRNRGYNEAPSVPADYASVY  
 EEKS YTDGRRENPC EFNRGYRDYTPLPVGY  
 VTKELEYFPETDKVWIEIGETEGTFIVDSV  
 ELLLMEE

FIG. 6

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      (start HD-1)          ATGG ATAACAATCC GAACATCAAT
GAATGCATTC CTTATAATTG TTTAAGTAAC CCTGAAGTAG AAGTATTAGG 600
TGGAGAAAGA ATAGAAACTG GTTACACCCC AATCGATATT TCCTTGTCGC
TAACGCAATT TCTTTTGAGT GAATTTGTTC CCGGTGCTGG ATTTGTGTTA 700
GGACTAGTTG ATATAATATG GGGAAATTTT GGTCCCTCTC AATGGGACGC
ATTTCTGTGA CAAATTGAAC AGTTAATTAA CCAAAGAATA GAAGAATTCG 800
CTAGGAACCA AGCCATTTCT AGATTAGAAG GACTAAGCAA TCTTTATCAA
ATTTACGCAG AATCTTTTAG AGAGTGGGAA GCAGATCCTA CTAATCCAGC 900
ATTAAGAGAA GAGATGCGTA TTCAATTCAA TGACATGAAC AGTGCCCTTA
CAACCGCTAT TCCTCTTTTG GCAGTTCAAA ATTATCAAGT TCCTCTTTTA 1000
TCAGTATATG TTCAAGCTGC AAATTTACAT TTATCAGTTT TGAGAGATGT
TTCAGTGTTC GGACAAAGGT GGGGATTTGA TGCCGCGACT ATCAATAGTC 1100
GTTATAATGA TTTAACTAGG CTTATTGGCA ACTATACAGA TTATGCTGTG
CGCTGGTACA ATACGGGATT AGAGCGTGTA TGGGGACCGG ATTCTAGAGA 1200
TTGGGTAAGG TATAATCAAT TTAGAAGAGA GCTAACACTT ACTGTATTAG
ATATCGTTGC TCTATTCTCA AATTATGATA GTCGAAGSTA TCCAATTCGA 1300
ACAGTTTCCC AATTAACAAG AGAAATTTAT ACGAACCAG TATTAGAAAA
TTTTGATGGT AGTTTTCTGT GAATGGCTCA GAGAATAGAA CAGAATATTA 1400
GGCAACCACA TCTTATGGAT ATCCTTAATA GTATAACCAT TTATACTGAT
GTGCATAGAG GCTTTAATTA TTGGTCAGGG CATCAAATAA CAGCTTCTCC 1500
TGTAGGGTTT TCAGGACCAG AATTCGCATT CCCTTTATTT GGGAAATGCGG
GGAATGCAGC TCCACCCGTA CTTGTCTCAT TAACTGTTT GGGGATTTTT 1600
AGAACATTAT CTTCACCTTT ATATAGAAGA ATTATACTTG GTTCAGGCCC
AAATAATCAG GAAGTGTGTT TCCTTGATGG AACGGAGTTT TCTTTTGCCT 1700
CCCTAACGAC CAAGTTGCCT TCCACTATAT ATAGACAAAG GGGTACAGTC
GATTCACCTAG ATGTAATACC GCCACAGGAT AATAGTGTAC CACCTCGTGC 1800
GGGATTTAGC CATCGATTGA GTCATGTTAC AATGCTGAGC CAAGCAGCTG
GAGCAGTTTA CACCTTGAGA GCTCAACGT (stop HD-1)
      (start HD-73)          CCT ATGTTCTCTT
GGATACATCG TAGTGCTGAA TTTAATAATA TAATTGCATC GGATAGTATT 1800
ACTCAAATCC CTGCAGTGAA GGGAAACTTT CTTTTTAATG GTTCTGTAAT
TTCAGGACCA GGATTTACTG GTGGGGACTT AGTTAGATTA AATAGTAGTG 1900
GAAATAACAT TCAGAATAGA GGGTATATTG AAGTTCCAAT TCACTTCCCC
TCGACATCTA CCAGATATCG AGTTCGTGTA CGGTATGCTT CTGTAACCCC 2000
GATTCACCTC AACGTTAATT GGGGTAATTC ATCCATTTTT TCCAATACAG
TACCAGCTAC AGCTACGTCA TTAGATAATC TACAATCAAG TGATTTTGGT 2100
TATTTTGAAA GTGCCAATGC TTTTACATCT TCATTAGGTA ATATAGTAGG
TGTTAGAAAT TTTAGTGGGA CTGCAGGAGT GATAATAGAC AGATTTGAAT 2200
TTATTCAGT TACTGCAACA CTCGAGGCTG AATATAATCT GGAAAGAGCG

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FIG. 7A





M D N N P N I N E C I P Y N C L S N P E V E V L G G E R I E  
 T G Y T P I D I S L S L T Q F L L S E F V P G A G F V L G L  
 V D I I W G I F G P S Q W D A F P V Q I E Q L I N Q R I E E  
 F A R N Q A I S R L E G L S N L Y Q I Y A E S F R E W E A D  
 P T N P A L R E E M R I Q F N D M N S A L T T A I P L L A V  
 Q N Y Q V P L L S V Y V Q A A N L H L S V L R D V S V F G Q  
 R W G F D A A T I N S R Y N D L T R L I G N Y T D Y A V R W  
 Y N T G L E R V W G P D S R D W V R Y N Q F R R E L T L T V  
 L D I V A L F S N Y D S R R Y P I R T V S Q L T R E I Y T N  
 P V L E N F D G S F R G M A Q R I E Q N I R Q P H L M D I L  
 N S I T I Y T D V H R G F N Y W S G H Q I T A S P V G F S G  
 P E F A F P L F G N A G N A A P P V L V S L T G L G I F R T  
 L S S P L Y R R I I L G S G P N N Q E L F V L D G T E F S F  
 A S L T T N L P S T I Y R Q R G T V D S L D V I P P Q D N S  
 V P P R A G F S H R L S H V T M L S Q A A G A V Y T L R A Q  
 R P M F S W I H R S A E F N N I I A S D S I T Q I P A V K G  
 N F L F N G S V I S G P G F T G G D L V R L N S S G N N I Q  
 N R G Y I E V P I H F P S T S T R Y R V R V R Y A S V T P I  
 H L N V N W G N S S I F S N T V P A T A T S L D N L Q S S D  
 F G Y F E S A N A F T S S L G N I V G V R N F S G T A G V I  
 I D R F E F I P V T A T L E A E Y N L E R A Q K A V N A L F  
 T S T N Q L G L K T N V T D Y H I D Q V S N L V T Y L S D E  
 F C L D E K R E L S E K V K H A K R L S D E R N L L Q D S N  
 F K D I N R Q P E R G W G G S T G I T I Q G G D D V F K E N  
 Y V T L S G T F D E C Y P T Y L Y Q K I D E S K L K A F T R  
 Y Q L R G Y I E D S Q D L E I Y L I R Y N A K H E T V N V P  
 G T G S L W P L S A Q S P I G K C G E P N R C A P H L E W N  
 P D L D C S C R D G E K C A H H S H H F S L D I D V G C T D  
 L N E D L G V W V I F K I K T Q D G H A R L G N L E F L E E  
 K P L V G E A L A R V K R A E K K W R D K R E K L E W E T N  
 I V Y K E A K E S V D A L F V N S Q Y D Q L Q A D T N I A M  
 I H A A D K R V H S I R E A Y L P E L S V I P G V N A A I F  
 E E L E G R I F T A F S L Y D A R N V I K N G D F N N G L S  
 C W N V K G H V D V E E Q N N Q R S V L V V P E W E A E V S  
 Q E V R V C P G R G Y I L R V T A Y K E G Y G E G C V T I H  
 E I E N N T D E L K F S N C V E E E I Y P N N T V T C N D Y  
 T V N Q E E Y G G A Y T S R N R G Y N E A P S V P A D Y A S  
 V Y E E K S Y T D G R R E N P C E F N R G Y R D Y T P L P V  
 G Y V T K E L E Y F P E T D K V W I E I G E T E G T F I V D  
 S V E L L L M E E

FIG. 8

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                                (start HD-73)                                ATG GATAACAATC 400
CGAACATCAA TGAATGCATT CCTTATAATT GTTTAAGTAA CCCTGAAGTA
GAAGTATTAG GTGGAGAAAG AATAGAAACT GGTTACACCC CAATCGATAT 500
TTCCTTGTGG CTAACGCAAT TTCTTTTGAG TGAATTTGTT CCCGGTGCTG
GATTTGTGTT AGSACTAGTT GATATAATAT GGGGAATTTT TGGTCCCTCT 600
CAATGGGACG CATTCTTGT ACAAATTGAA CAGTTAATTA ACCAAAGAAT
AGAAGAATTC GCTAGGAACC AAGCCATTTT TAGATTAGAA GGAATAAGCA 700
ATCTTTATCA AATTTACGCA GAATCTTTTA GAGAGTGGGA AGCAGATCCT
ACTAATCCAG CATTAAGAGA AGAGATGCGT ATTCAATTCA ATGACATGAA 800
CAGTGCCCTT ACAACCGCTA TTCCTCTTTT TGCAGTTCAA AATTATCAAG
TTCCTCTTTT ATCAGTATAT GTTCAAGCTG CAAATTTACA TTTATCAGTT 900
TTGAGAGATG TTTCAGTGTT TGGACAAAGG TGGGGATTTG ATGCCGCGAC
TATCAATAGT CGTTATAATG ATTTAACTAG GCTTATTGGC AACTATACAG 1000
ATTATGCTGT ACGCTGGTAC AATACGGGAT TAGAACGTGT ATGGGGACCG
GATTCTAGAG ATTGGGTAAG GTATAATCAA TTTAGAAGAG AATTAACACT 1100
AACTGTATTA GATATCGTTG CTCTGTTCCC GAATTATGAT AGTAGAAGAT
ATCCAATTCG AACAGTTTCC CAATTAACAA GAGAAATTTA TACAAACCCA 1200
GTATTAGAAA ATTTTGATGG TAGTTTTCGA GGCTCGGCTC AGGGCATAGA
AAGAAGTATT AGGAGTCCAC ATTTGATGGA TATACTTAAC AGTATAACCA 1300
TCTATACGGA TGCTCATAGG GGTATTATT ATTGGTCAGG GCATCAAATA
ATGGCTTCTC CTGTAGGGTT TTCGGGGCCA GAATTCACTT TTCCGCTATA 1400
TGGAACATG GGAATGCGAG CTCCACAACA ACGTATTGTT GCTCAACTAG
GTCAGGGCGT GTATAGAACA TTATCGTCCA CTTTATATAG AAGACCTTTT 1500
AATATAGGGA TAAATAATCA ACAACTATCT GTTCTTGACG GGACAGAATT
TGCTTATGGA ACCTCCTCAA ATTTGCCATC CGCTGTATAC AGAAAAAGCG 1600
GAACGGTAGA TTCGCTGGAT GAAATACCGC CACAGAATAA CAACGTGCCA
CCTAGGCAAG GATTAGTCA TCGATTAAAG CATGTTTCAA TGTTTCGTTT 1700
AGGCTTTAGT AATAGTAGTG TAAGTATAAT AAGAGCT (end hd-73)
                                (start HD-1)                                CCAACGT TTTCTTGGCA GCATCGCAGT 1900
GCTGAATTTA ATAATATAAT TCCTTCATCA CAAATTACAC AAATACCTTT
AACAAATCT ACTAATCTTG GCTCTGGAAC TTCTGTCGTT AAAGGACCAG 2000
GATTTACAGG AGGAGATATT CTTGGAAGAA CTTACCTGG CCAGATTTCA
ACCTTAAGAG TAAATATTAC TGCACCATTA TCACAAAGAT ATCGGGTAAG 2100
AATTCGCTAC GCTTCTACTA CAAATTTACA ATTCCATACA TCAATTGACG
GAAGACCTAT TAATCAGGGT AATTTTTCAG CAACTATGAG TAGTGGGAGT 2200
AATTTACAGT CCGGAAGCTT TAGGACTGTA GGTTTTACTA CTCCGTTTAA
CTTTTCAAAT GGATCAAGTG TATTTACGTT AAGTGCTCAT GTCTTCAATT 2300
CAGGCAATGA AGTTTATATA GATCGAATTC AATTTGTTCC GGCAGAAGTA
ACCTTTGAGG CAGAATATGA TTTAGAAAGA GCACAAAGG CGGTGAATGA 2400
GCTGTTTACT TCTTCCAATC AAATCGGGT AAAAACAGAT GTGACGGATT
ATCATATTGA TCAAGTATCC AATTTAGTTG AGTGTTTATC AGATGAATTT 2500
TGTCTGGATG AAAACAAGA ATTGTCCGAG AAAGTCAAAC ATGCGAAGCG
ACTTAGTGAT GAGCGGAATT TACTTCAAGA TCCAACTTC AGAGGGATCA 2600
ATAGACAACT AGACCGTGGC TGGAGAGGAA GTACGGATAT TACCATCCAA

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FIG. 9A

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GGAGGCGATG ACGTATTCAA AGAGAATTAC GTTACGCTAT TGGGTACCTT 2700
TGATGAGTGC TATCCAACGT ATTTATATCA AAAAATAGAT GAGTCGAAAT
TAAAAGCCTA TACCCGTTAT CAATTAAGAG GGTATATCGA AGATAGTCAA 2800
GACTTAGAAA TCTATTTAAT TCGCTACAAT GCAAAACATG AAACAGTAAA
TGTGCCAGGT ACGGGTTCCT TATGCCCGCT TTCAGCCCAA AGTCCAATCG 2900
GAAAGTGTGG AGAGCCGAAT CGATGCGCGC CACACCTTGA ATGGAATCCT
GACTTAGATT GTTCGTGTAG GGATGGAGAA AAGTGTGCCC ATCATTGCGA 3000
TCATTTCTCC TTAGACATTG ATGTAGGATG TACAGACTTA AATGAGGACC
TAGGTGTATG GGTGATCTTT AAGATTAAGA CGCAAGATGG GCACGCAAGA 3100
CTAGGGAATC TAGAGTTTCT CGAAGAGAAA CCATTAGTAG GAGAAGCGCT
AGCTCGTGTG AAAAGAGCGG AGAAAAAATG GAGAGACAAA CGTGAAAAAT 3200
TGAATGGGA AACAAATATC GTTTATAAAG AGGCAAAAGA ATCTGTAGAT
GCTTTATTTG TAAACTCTCA ATATGATCAA TTACAAGCGG ATACGAATAT 3300
TGCCATGATT CATGCGGCGAG ATAAACGTGT TCATAGCATT CGAGAAGCTT
ATCTGCCTGA GCTGTCTGTG ATTCCGGGTG TCAATGCGGC TATTTTTGAA 3400
GAATTAGAAG GGCATTTTT CACTGCATTC TCCCTATATG ATGCGAGAAA
TGTCATTAAG AATGGTGATT TTAATAATGG CTTATCCTGC TGGAACGTGA 3500
AAGGGCATGT AGATGTAGAA GAACAAAACA ACCAACGTTT GGTCTTGT
CTTCCGGAAT GGGAGCAGA AGTGTCACAA GAAGTTCGTG TCTGTCCGGG 3600
TCGTGGCTAT ATCCTTCGTG TCACAGCGTA CAAGGAGGGA TATGGAGAAG
GTTGCGTAAC CATTCATGAG ATCGAGAACG ATACAGACGA ACTGAAGTTT 3700
AGCAACTGCG TAGAAGAGGA AATCTATCCA AATAACACGG TAACGTGTAA
TGATTATACT GTAAATCAAG AAGAATACGG AGGTGCGTAC ACTTCTCGTA 3800
ATCGAGGATA TAACGAAGCT CCTTCCGTAC CAGCTGATTA TCGTCAATC
TATGAAGAAA AATCGTATAC AGATGGACGA AGAGAGAATC CTTGTGAATT 3900
TAACAGAGGG TATAGGGATT ACACGCCACT ACCAGTTGGT TATGTGACAA
AAGAATTAGA ATACTTCCCA GAAACCGATA AGGTATGGAT TGAGATTGGA 4000
GAAACGGAAG GAACATTTAT CGTGGACAGC GTGGAATTAC TCCTTATGGA
GGAA (end HD-1)

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FIG. 9B



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                                (start HD-73)                                ATG GATAACAATC 400
CGAACATCAA TGAATGCATT CCTTATAATT GTTTAAGTAA CCCTGAAGTA
GAAGTATTAG GTGGAGAAAG AATAGAAACT GGTACACCC CAATCGATAT 500
TTCCTTGTCG CTAACGCAAT TTCTTTTGAG TGAATTTGTT CCCGGTGCTG
GATTTGTGTT AGGACTAGTT GATATAATAT GGGGAATTTT TGGTCCCTCT 600
CAATGGGACG CATTTCCTTG ACAAATTGAA CAGTTAATTA ACCAAGAAT
AGAAGAATTC GCTAGGAACC AAGCCATTTT TAGATTAGAA GGAATAAGCA 700
ATCTTTATCA AATTACGCA GAATCTTTTA GAGAGTGGGA AGCAGATCCT
ACTAATCCAG CATTAGAGA AGAGATGCGT ATTCAATTCA ATGACATGAA 800
CAGTGGCCCT ACAACCGCTA TTCCTCTTTT TGCAGTTCAA AATTATCAAG
TTCCTCTTTT ATCAGTATAT GTTCAAGCTG CAAATTTACA TTTATCAGTT 900
TTGAGGATG TTTGAGTGT TGGACAAAGG TGGGGATTG ATGCCGCGAC
TATCAATAGT CGTTATAATG ATTTAACTAG GCTTATTGGC AACTATACAG 1000
ATTATGCTGT ACGCTGGTAC AATACGGGAT TAGAACGTGT ATGGGGACCG
GATTCTAGAG ATTGGGTAA GATAATCAA TTTAGAAGAG AATTAACACT 1100
AACTGTATTA GATATCGTTG CTCTGTTCCC GAATTATGAT AGTAGAAGAT
ATCCAATTCG AACAGTTTCC CAATTAACAA GAGAAATTTA TACAAACCCA 1200
GTATTAGAAA ATTTTGATGG TAGTTTTGGA GGCTCGGCTC AGGGCATAGA
AAGAAGTATT AGGAGTCCAC ATTTGATGGA TACTTAAAC AGTATAACCA 1300
TCTATACGGA TGCTCATAGG GGTTATTATT ATTGGTCAGG GCATCAAATA
ATGGCTTCTC CTGTAGGGTT TTCGGGGCCA GAATTCACTT TTCCGCTATA 1400
TGGAACTATG GGAATGCGAG CTCCACAACA ACGTATTGTT GCTCACTAG
GTGAGGGCGT GTATAGAACA TTATCGTCCA CTTTATATAG AAGACCTTTT 1500
AATATAGGGA TAAATAATCA ACAACTATCT GTTCTTGACG GGACAGAATT
TGCTTATGGA ACCTCCTCAA ATTTGCCATC CGCTGTATAC AGAAAAAGCG 1600
GAACGGTAGA TTCGCTGGAT GAAATACCGC CACAGAATAA CAACGTGCCA
CCTAGGCAAG GATTAGTCA TCGATTAAGC CATGTTTCAA TGTTTCGTTT 1700
AGGCTTTAGT AATAGTAGTG TAAGTATAAT AAGAGCT (end hd-73)
                                (start HD-1)                                CCAACGT TTTCTTGGCA GCATCGCAGT 1900
GCTGAATTTA ATAATATAAT TCCTTCATCA CAAATTACAC AAATACCTTT
AACAAATCT ACTAATCTTG GCTCTGGAAC TTCTGTCGTT AAAGGACCAG 2000
GATTACAGG AGGAGATATT CTTGGAAGAA CTTACCTGG CCAGATTTCA
ACCTTAAGAG TAAATATTAC TGCACCATTA TCACAAAGAT ATCGGGTAAG 2100
AATTCGCTAC GCTTCTACTA CAAATTTACA ATTCCATACA TCAATTGACG
GAAGACCTAT TAATCAGGGT AATTTTTCAG CAACTATGAG TAGTGGGAGT 2200
AATTTACAGT CCGGAAGCTT TAGGACTGTA GGTTTTACTA CTCCGTTTAA
CTTTTCAAAT GGATCAAGTG TATTTACGTT AAGTGCTCAT GTCTTCAATT 2300
CAGGCAATGA AGTTTATATA GATCGAATTG AATTTGTTCC GGCAGAAGTA
ACCTTTGAGG CAGAATATGA TTTAGAAAGA GCACAAAAGG CGGTGAATGA 2400
GCTGTTTACT TCTTCCAATC AAATCGGGTT AAAACAGAT GTGACGGATT
ATCATATTGA TCAAGTATCC AATTTAGTTG AGTGTTCATC AGATGAATTT 2500
TGTCTGGATG AAAACAAGA ATTGTCCGAG AAAGTCAAAC ATGCGAAGCG
ACTTAGTGAT GAGCGGAATT TACTTCAAGA TCCAACTTC AGAGGGATCA 2600
ATAGACAACT AGACCGTGGC TGGAGAGGAA GTACGGATAT TACCATCCAA
GGAGGCGATG ACGTATTCAA AGAGAATTAC GTTACGCTAT TGGGTACCTT 2700
TGATGAGTGC TATCCAACGT ATTTATATCA AAAAATAGAT GAGTCGAAAT

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FIG. 11A

TAAAGCCTA	TACCCGTTAT	CAATTAAGAG	GGTATATCGA	AGATAGTCAA	2800
GACTTAGAAA	TCTATTTAAT	TCGCTACAAT	GCAAAACATG	AAACAGTAAA	
TGTGCCAGGT	ACGGGTTCCCT	TATGGCCGCT	TTCAGCCCAA	AGTCCAATCG	2900
GAAAGTGTGG	AGAGCCGAAT	CGATGCGCGC	CACACCTTGA	ATGGAATCCT	
GACTTAGATT	GTTCTGTGTAG	GGATGGAGAA	AAGTGTGCCC	ATCATTGCGA	3000
TCATTTCTCC	TTAGACATTG	ATGTAGGATG	TACAGACTTA	AATGAGGACC	
TAGGTGTATG	GGTGATCTTT	AAGATTAAGA	CGCAAGATGG	GCACGCAAGA	3100
CTAGGGAATC	TAGAGTTTCT	CGAAGAGAAA	CCATTAGTAG	GAGAAGCGCT	
AGCTCGTGTG	AAAAGAGCGG	AGAAAAAATG	GAGAGACAAA	CGTGAAAAAT	3200
TGGAATGGGA	AACAAATATC	GTTTATAAAG	AGGCAAAAGA	ATCTGTAGAT	
GCTTTATTTG	TAAACTCTCA	ATATGATCAA	TTACAAGCGG	ATACGAATAT	3300
TGCCATGATT	CATGCGGCGAG	ATAAACGTGT	TCATAGCATT	CGAGAAGCCT	
ATCTGCCGTG	GCTGCTGTG	ATTCCGGGTG	TCATGCGGCT	TATTTTGGAA	3400
GGAATTGAGA	GCGGTATTTT	CACCTGCATTC	TCCCTATATG	ATGCGAGAAA	
TGTCATTAATA	AATGGTGATT	TTAATAATGG	CTTATCCTGC	TGGAACGTGA	3500
AAGGGCATGT	AGATGTAGAA	GAACAAAACA	ACCAACGTTT	GGTCCCTGTT	
CTTCCGGAAT	GGGAAGCAGA	AGTGTCAACA	GAAGTTCGTG	TCTGTCCGGG	3600
TCGTGGCTAT	ATCCTTCGTG	TCACAGCGTA	CAAGGAGGGA	TATGGAGAAG	
GTTGCGTAAC	CATTCAATGAG	ATCGAGAACA	ATACAGACGA	ACTGAAGTTT	3700
AGCAACTGCG	TAGAAGAGGA	AATCTATCCA	AATAACACGG	TAACGTGTAA	
TGATTATACT	GTAAATCAAG	AAGAATACGG	AGGTGCGTAC	ACTTCTCGTA	3800
ATCGAGGATA	TAAACGAAGCT	CCTTCCGTAC	CAGCTGATTA	TGCGTCAGTC	
TATGAAGAAA	AATCGTATAC	AGATGGACGA	AGAGAGAATC	CTTGTGAATT	3900
TAACAGAGGG	TATAGGGATT	ACACGCCACT	ACCAATTGGT	TATGTSACAA	
AAGAATTAGA	ATACTTCCCA	GAAACCGATA	AGGTATGGAT	TAGATTGGGA	4000
GAAACGGGAG	GAACATTTAT	CGTGGACAGC	GTGGAAATTAC	TCCTTATGGA	
GGAA (end HD-1)					

FIG. 11B

